

### ABSTRACT

A safety stock amount calculation method includes step S8  
5 for calculating a probability  $P_b$  that a delivery time for a  
certain commodity required by a customer is shorter than its  
lead time  $L$ , step S9 for calculating an average value  $LL$  of a  
difference between the lead time  $L$  and the customer's required  
delivery time when the lead time  $L$  exceeds the customer's  
10 required delivery time, step S10 for correcting an inventory  
adjustment period  $N$  by using the average value  $LL$ , and step  
S11 for calculating a safety stock amount  $SS$  by the equations  
 $SS = P_b \times k \times (\sqrt{N} \times F) \times \sigma$ , wherein  $\sigma$  is a standard deviation  
of demand for the commodity,  $N$  is a corrected inventory  
15 adjustment period,  $P_b$  is a probability,  $F$  is a shipment  
frequency, and  $k$  is a safety coefficient.